

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
1 September 2005 (01.09.2005)

PCT

(10) International Publication Number
WO 2005/080588 A3

(51) International Patent Classification⁷: C12Q 1/26

(74) Agents: **WOODS, Geoffrey, Corlett** et al.; J.A. Kemp & Co., 14 South Square, Gray's Inn, London WC1R 5JJ (GB).

(21) International Application Number:
PCT/GB2005/000623

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(22) International Filing Date: 18 February 2005 (18.02.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0403746.1 19 February 2004 (19.02.2004) GB
0424080.0 29 October 2004 (29.10.2004) GB

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(71) Applicant (*for all designated States except US*): **F2G LTD** [GB/GB]; Lankro Way, Eccles, Manchester, Greater Manchester M30 0BH (GB).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **LAVENS, Sandra, Elizabeth** [GB/GB]; F2G Limited, Lankro Way, Eccles, Manchester, Greater Manchester M30 0BH (GB). **OLIVER, Jason, David** [GB/GB]; F2G Limited, Lankro Way, Eccles, Manchester, Greater Manchester M30 0BH (GB). **THAIN, John, Leslie** [GB/GB]; F2G Limited, Lankro Way, Eccles, Manchester, Greater Manchester M30 0BH (GB). **TUCKWELL, Daniel, Scott** [GB/GB]; F2G Limited, Lankro Way, Eccles, Manchester, Greater Manchester M30 0BH (GB). **BROMLEY, Michael, John** [GB/GB]; F2G Limited, Lankro Way, Eccles, Manchester, Greater Manchester M30 0BH (GB).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
15 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: 2031 OXIDOREDUCTASE

(57) Abstract: Method of identifying an anti-fungal agent which targets an essential protein or gene of a fungus comprising contacting a candidate substance with (i) a NADH:flavin oxidoreductase protein which comprises the sequence shown by SEQ ID NO:3, (ii) a NADH:flavin oxidoreductase protein which is a homologue of (i) and which comprises the sequence shown by SEQ ID NO: 8, 12, 14, 19, 24, 42, 44, 83 or 85, (iii) a protein which has 50 % identity with (i) or (ii), (iv) a protein comprising a fragment of (i), (ii) or (iii) which fragment has a length of at least 50 amino acids, (v) a polynucleotide that comprises sequence which encodes (i), (ii), (iii) or (iv), (vi) a polynucleotide comprising sequence which has at least 70 % identity with the coding sequence of (v), and determining whether the candidate substance binds or modulates (i), (ii), (iii), (iv), (v) or (vi), wherein binding or modulation of (i), (ii), (iii), (iv), (v) or (vi) indicates that the candidate substance is an anti-fungal agent.



WO 2005/080588 A3